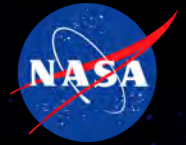


NASA's Space Launch System:

National Aeronautics and
Space Administration



Exploration Beyond Earth Orbit

Todd A. May, Manager
Space Launch System Program
NASA Marshall Space Flight Center

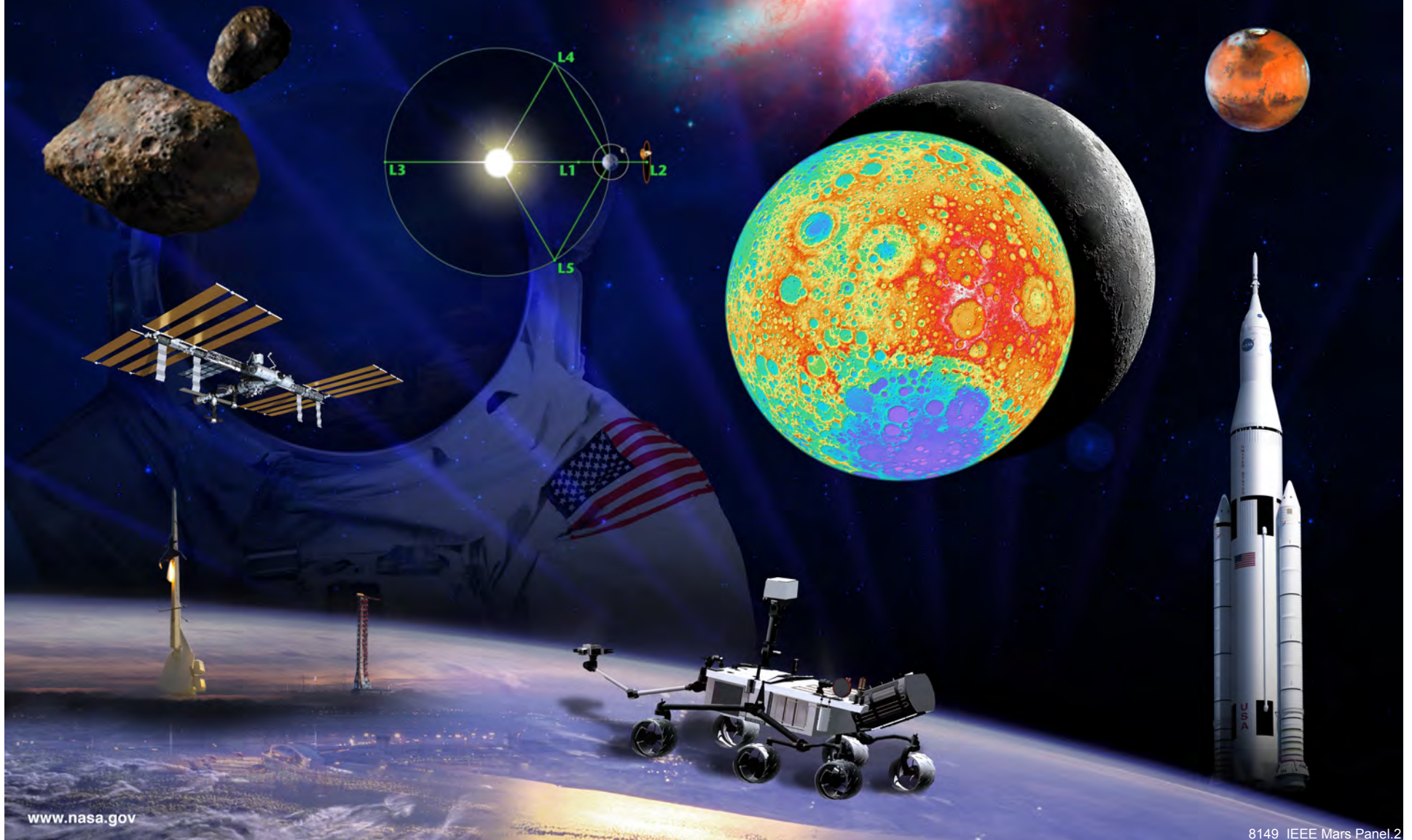
March 2012

space launch system

"To reach for new heights..."

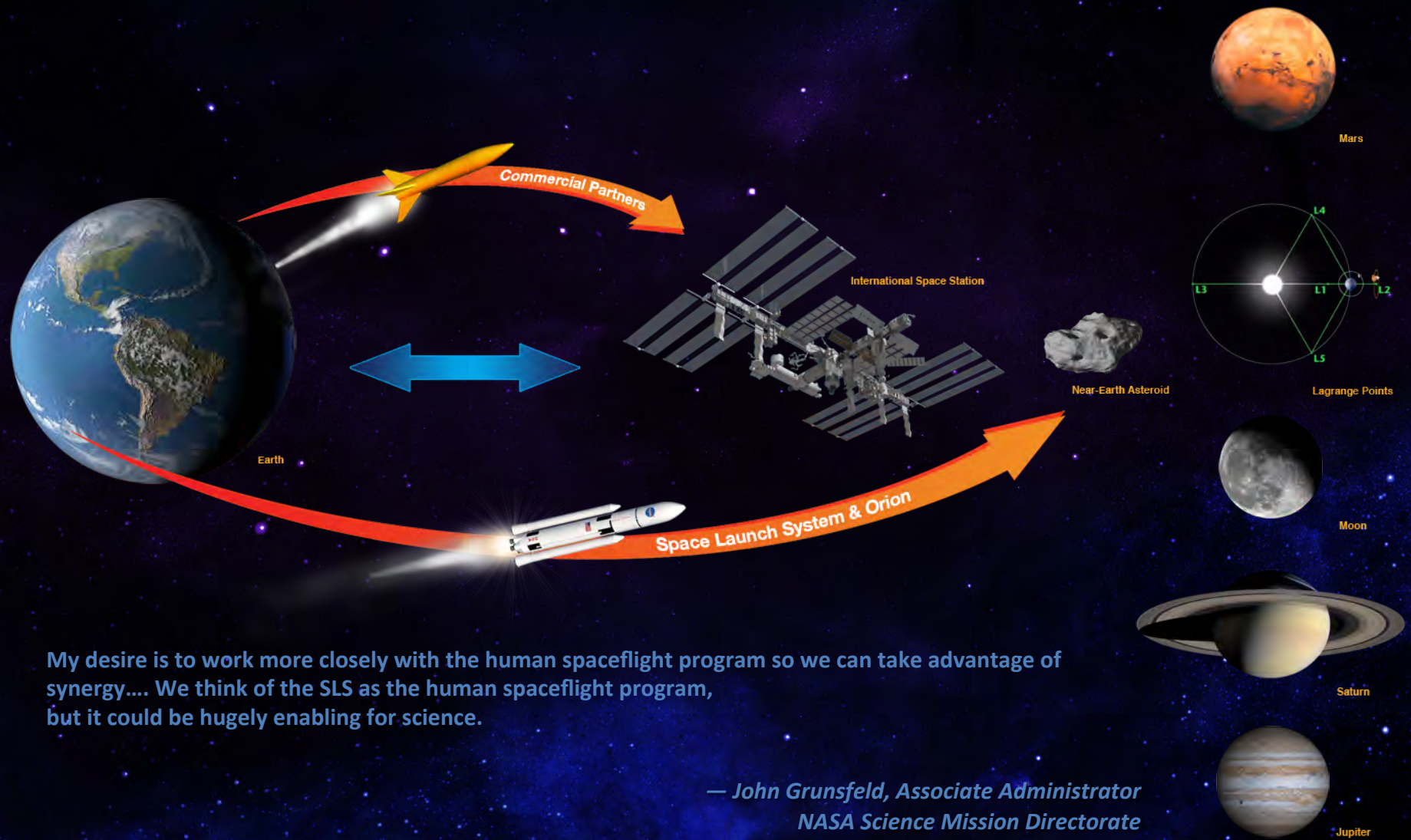
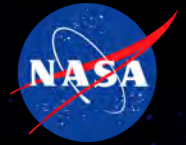
and reveal the unknown so that what we do and learn
will benefit all humankind."

National Aeronautics and
Space Administration



The Future of Exploration

National Aeronautics and
Space Administration

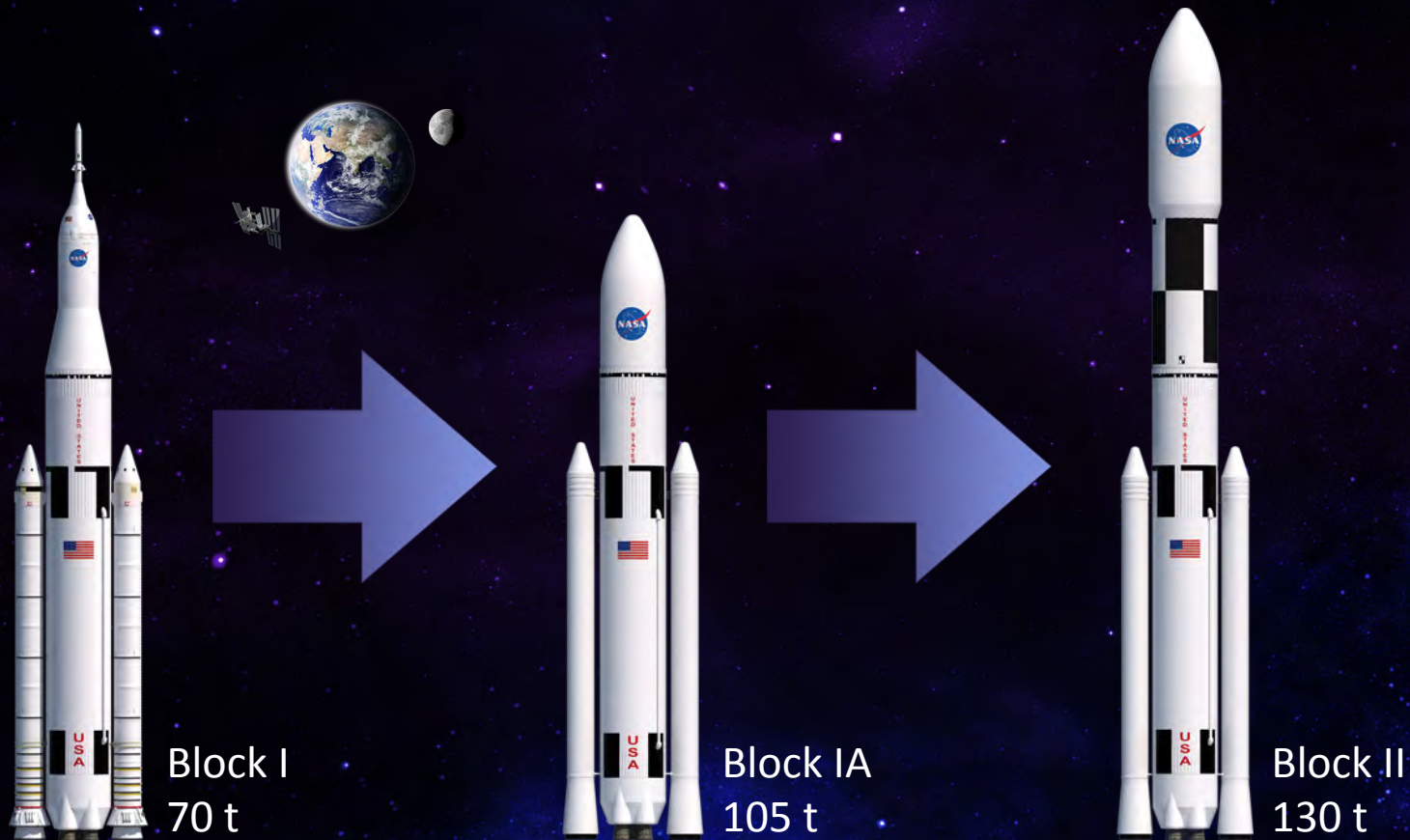
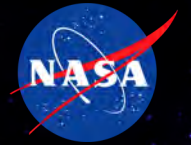


My desire is to work more closely with the human spaceflight program so we can take advantage of synergy.... We think of the SLS as the human spaceflight program, but it could be hugely enabling for science.

— John Grunsfeld, Associate Administrator
NASA Science Mission Directorate
Nature, Jan 19, 2012

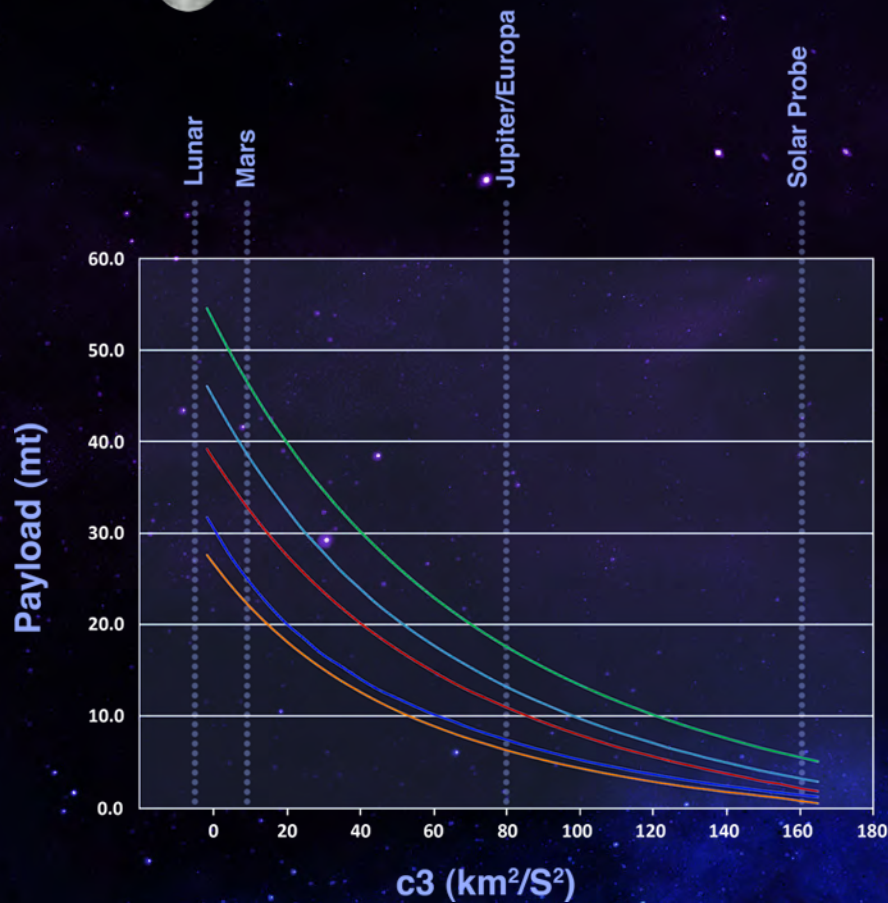
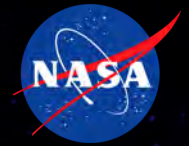
- NASA's Space Launch System (SLS) will be the most powerful rocket ever built.
- This heavy-lift rocket will take astronauts and high-priority science payloads beyond the Moon to new destinations, such as an asteroid and Mars.
- The SLS rocket will be an asset for international cooperation and help create opportunities to enrich the future for people around the world.

National Aeronautics and
Space Administration

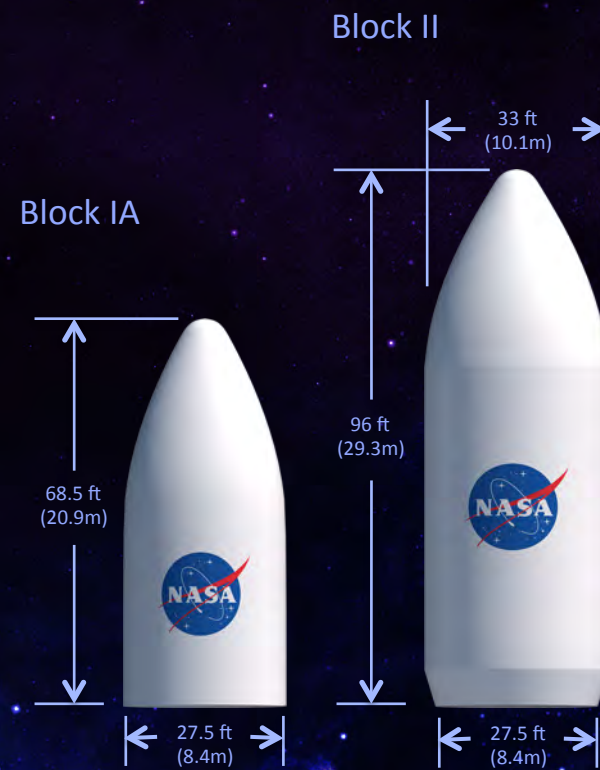


Vehicle Configurations

space launch system

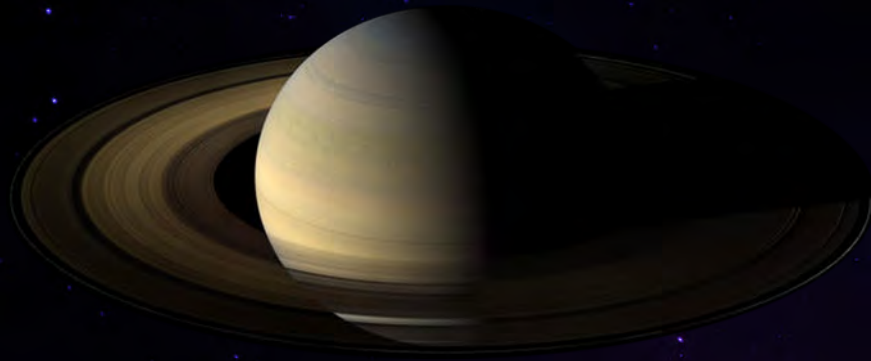
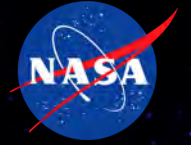


Mission Performance



Payload / Fairing

space launch system



Performance = Higher Payload Margins



Performance = Significantly Faster Trip Times



Performance = Less Complex Mechanisms



Volume = Fewer Deployments and On-Orbit Operations

Safe, Affordable, Sustainable

space launch system

A composite image of the solar system. In the upper left, a large, bright yellow Sun with a soft orange glow. To its right, the Earth is shown with blue oceans and white clouds. Further right is the Moon, appearing as a small, grey sphere. To the right of the Moon is Mars, a reddish-orange planet with visible surface features. In the foreground, numerous brown, rocky asteroids of various sizes are scattered across the dark blue space. A small satellite with solar panels is visible near the Earth.

Somewhere, something incredible
is waiting to be known.

Carl Sagan

For More Information



www.nasa.gov/sls